

Fig. 1

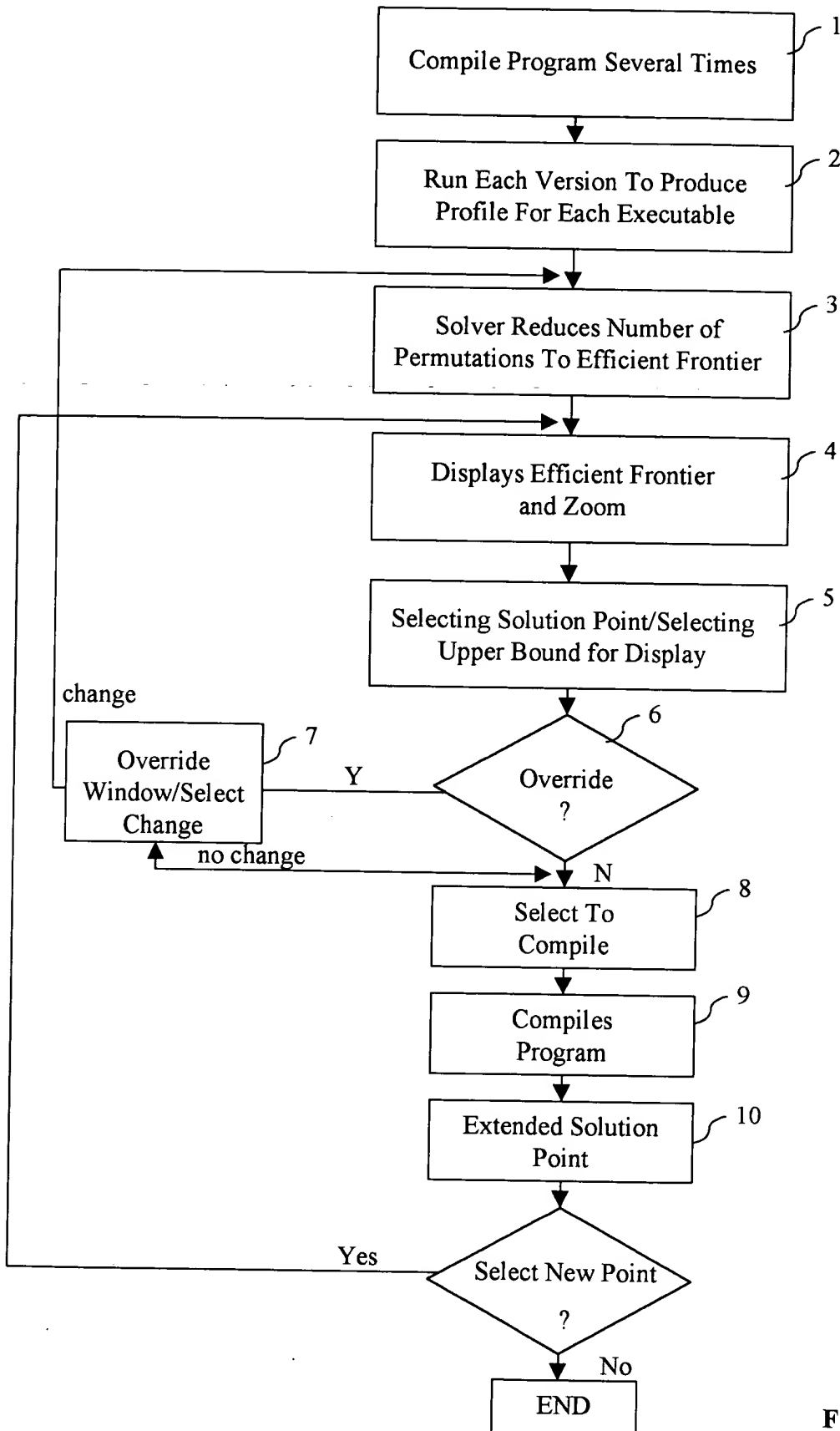


Fig. 2

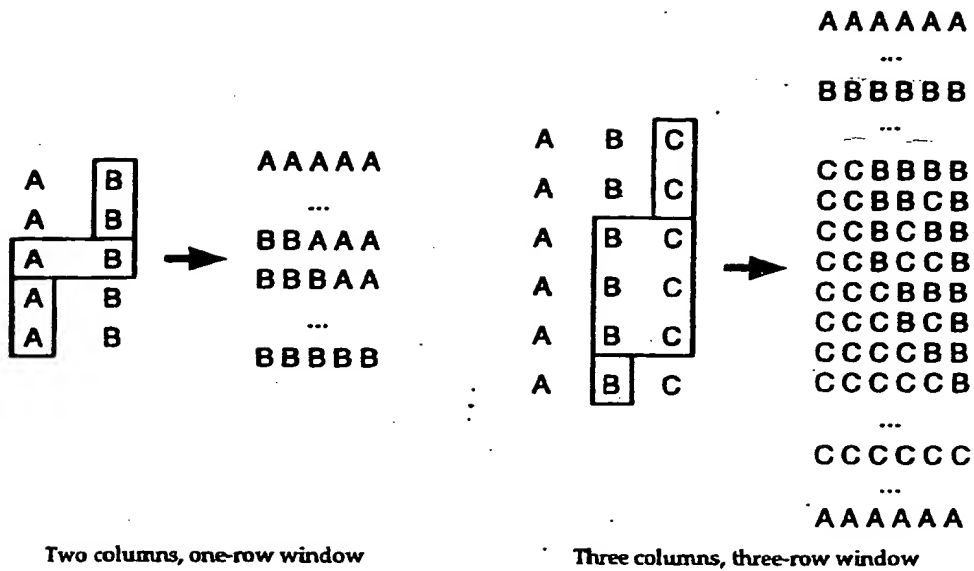


Figure 3: "Linear" Solution Generation

~~CONFIDENTIAL~~

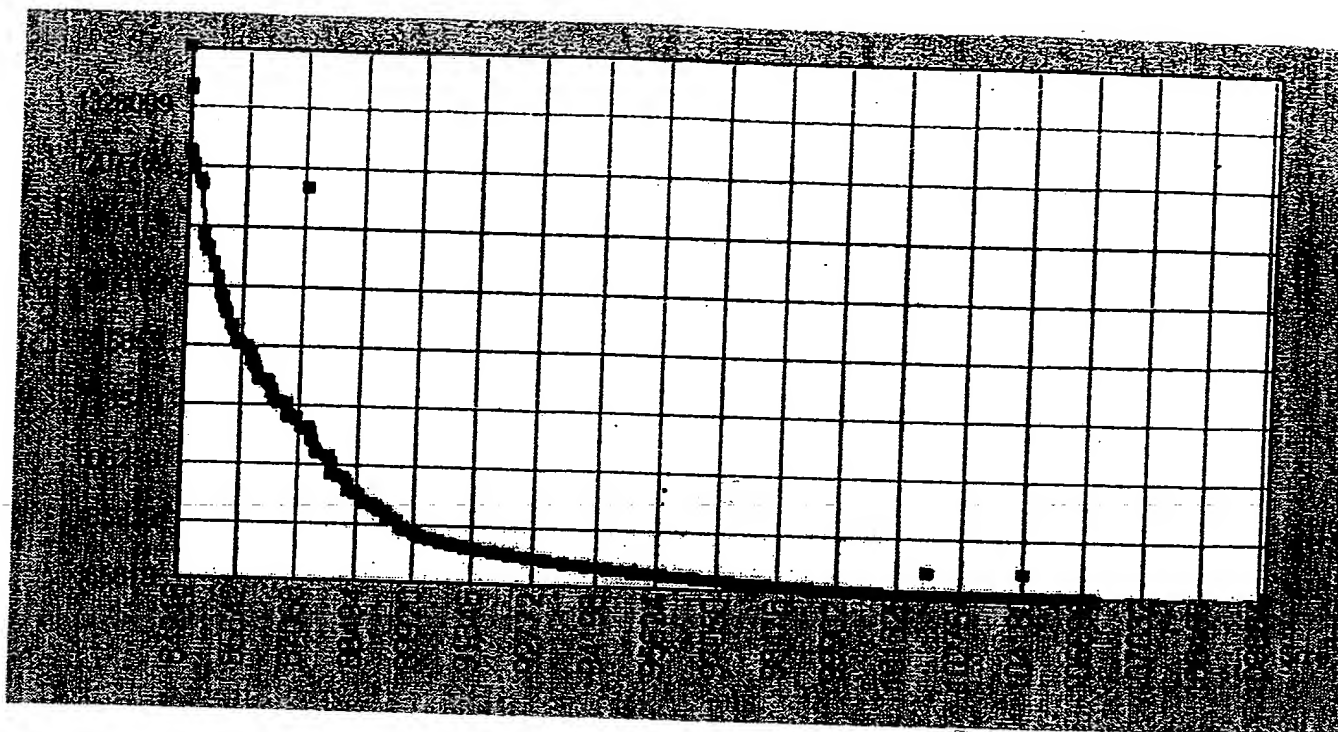


Figure 5

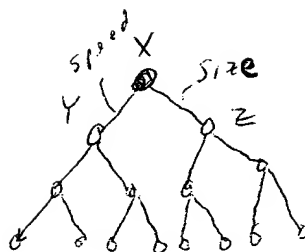


Fig 4

~~7130700~~

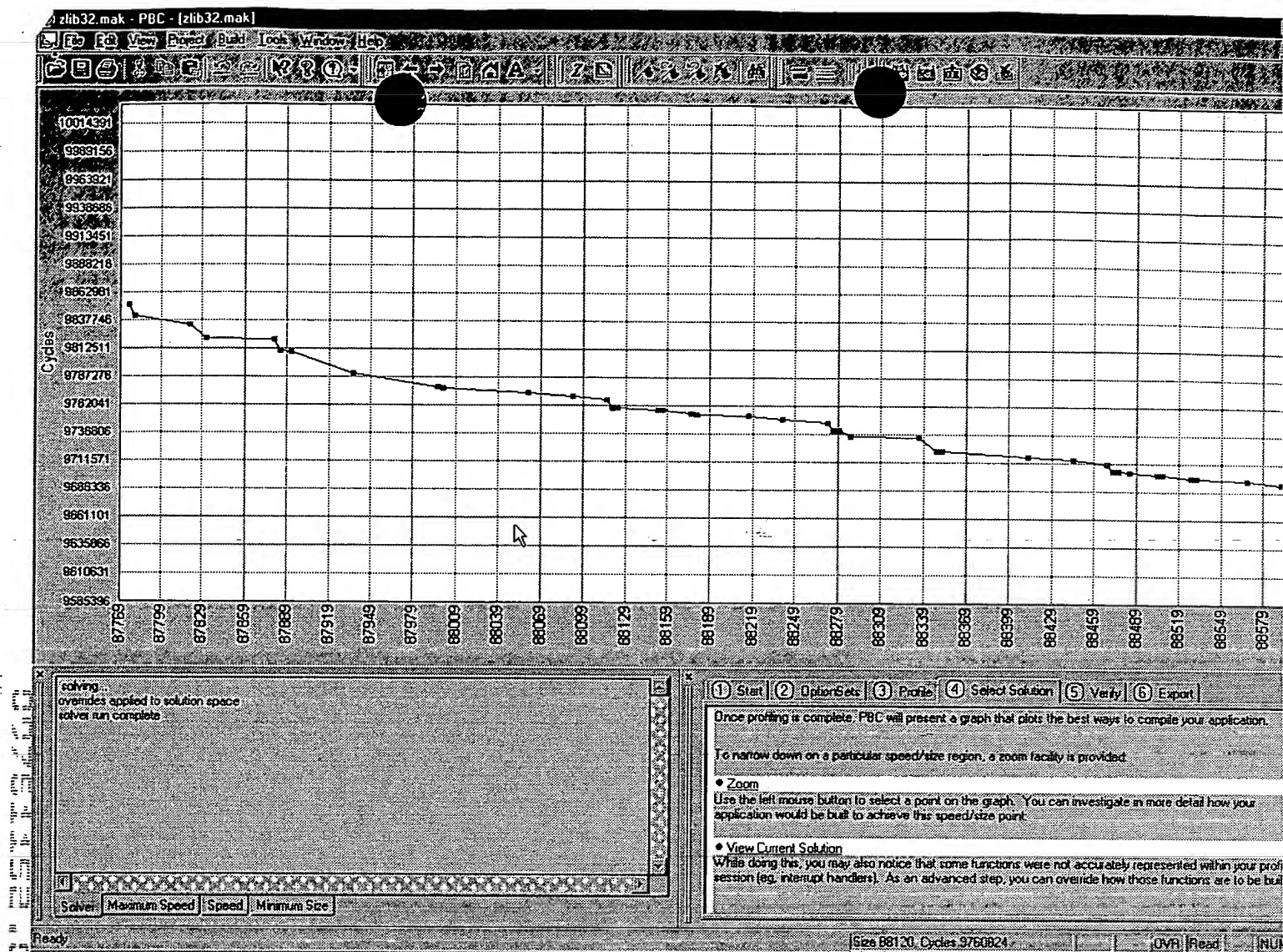


Fig. 6

| Function | Cycles | Size | Options |
|-----------------------|--------|------|---------------|
| decoder_homing_fra... | 26 | 80 | -03 -010 -ms2 |
| rx_dlx | 99 | 900 | -03 -010 -ms3 |
| D_plsf_5 | 641 | 1716 | -03 -010 -ms3 |
| Q_plsf_5 | 744 | 1448 | -03 -010 -ms3 |
| decoder_reset | 296 | 368 | -03 -010 -ms3 |
| ht_lpc2 | 296 | 224 | -03 -010 -ms3 |
| Lsf_wt | 770 | 236 | -03 -010 -ms3 |
| main | 2919 | 1680 | -03 -010 -ms3 |
| reset_rx_dlx | 274 | 172 | -03 -010 -ms3 |
| reset_tx_dlx | 315 | 184 | -03 -010 -ms3 |
| Enc_lag6 | 242 | 344 | -03 -010 -ms3 |
| vad_reset | 506 | 184 | -03 -010 -ms2 |
| ht_lnc | 616 | 272 | -03 -010 -ms3 |

Figure 7

Overrides

| Function | OptionSet/Rule | Rule | OptionSet | Cycles | Size | Options |
|------------------|----------------|--|---|--------|------|---------------|
| Init_Pre_Process | None | <input checked="" type="radio"/> Smallest <input type="radio"/> Fastest <input type="radio"/> None | | | | |
| set_sign | None | | | | | |
| search_1040 | None | | | | | |
| q_l_p | None | | <input checked="" type="radio"/> Maximum Speed | 67480 | 6364 | -o3 -o10 |
| cor_h_x | None | | <input checked="" type="radio"/> Aggressive Speed | 67864 | 6316 | -o3 -o10 -ms0 |
| cor_h | None | | <input checked="" type="radio"/> Speed | 66380 | 6492 | -o3 -o10 -ms1 |
| build_code | None | | <input checked="" type="radio"/> Size | 217240 | 5048 | -o3 -o10 -ms2 |
| code_1040_35bits | None | | <input checked="" type="radio"/> Minimum Size | 292348 | 5056 | -o3 -o10 -ms3 |
| Coder_12k2 | None | | | | | |
| Vq_subvec_s | None | | | | | |
| Vq_subvec | None | | | | | |
| Lsf_wt | None | | | | | |
| Q_plec_5 | None | | | | | |

Figure 8

| | | | |
|--------------------|--------|--------------------|--------|
| Estimated: | | Actual: | |
| Cycles: | 414834 | Cycles: | 414834 |
| Size: | 53024 | Size: | 53058 |
| Unprofiled Cycles: | 80458 | Unprofiled Cycles: | 80532 |
| Unprofiled Size: | 36388 | Unprofiled Size: | 36436 |
| Total Cycles: | 495292 | Total Cycles: | 495368 |
| Total Size: | 89412 | Total Size: | 89504 |

| Function | Estimated Cycles | Estimated Size | Option Set | Profiled Cycles | Profiled Size | Delta Cycles | Delta Size |
|-------------|------------------|----------------|----------------|-----------------|---------------|--------------|------------|
| search_1040 | 66380 | 6432 | Speed | 66380 | 6516 | 0 | 24 |
| Syn_filt | 32928 | 744 | Maximum Spe... | 32928 | 744 | 0 | 0 |
| Vq_subvec | 25520 | 320 | Minimum Size | 25520 | 320 | 0 | 0 |
| Lag_max | 22404 | 708 | Maximum Spe... | 22404 | 708 | 0 | 0 |
| Vq_subvec_s | 19769 | 616 | Minimum Size | 19769 | 616 | 0 | 0 |
| Norm_Corr | 16466 | 1280 | Maximum Spe... | 16466 | 1280 | 0 | 0 |
| Coder_12k2 | 16030 | 3520 | Minimum Size | 16030 | 3520 | 0 | 0 |

Figure 9